(a) contacting said biological sample with one or more nucleic acid probes of HIV-1 selected from the group consisting of:

(1) the probe corresponding to ORF-Q having the following nucleotide sequence:

```
4480        4490        4500        4510        4520        4530
 TGC  CAAGAAGAAA  AGCAAAGATC  ATTAGGGATT  ATGGAAAACA  GATGGCAGGT

      4540        4550        4560        4570        4580
GATGATTGTG  TGGCAAGTAG  ACAGGATGAG  GATTAGAACA  TGGAAAAGTT

      4590        4600        4610        4620        4630
TAGTAAAACA  CCATATGTAT  GTTTCAGGGA  AAGCTAGGGG  ATGGTTTTAT

      4640        4650        4660        4670        4680
AGACATCACT  ATGAAAGCCC  TCATCCAAGA  ATAAGTTCAG  AAGTACACAT

      4690        4700        4710        4720        4730
CCCACTAGGG  GATGCTAGAT  TGGTAATAAC  AACATATTGG  GGTCTGCATA

      4740        4750        4760        4770        4780
CAGGAGAAAG  AGACTGGCAT  CTGGGTCAGG  GAGTCTCCAT  AGAATGGAGG

      4790        4800        4810        4820        4830
AAAAAGAGAT  ATAGCACACA  AGTAGACCCT  GAACTAGCAG  ACCAACTAAT

      4840        4850        4860        4870        4880
TCATCTGTAT  TACTTTGACT  GTTTTTCAGA  CTCTGCTATA  AGAAAGGCCT

      4890        4900        4910        4920        4930
TATTAGGACA  TATAGTTAGC  CCTAGGTGTG  AATATCAAGC  AGGACATAAC

      4940        4950        4960        4970        4980
AAGGTAGGAT  CTCTACAATA  CTTGGCACTA  GCAGCATTAA  TAACACCAAA

      4990        5000        5010        5020        5030
AAAGATAAAG  CCACCTTTGC  CTAGTGTTAC  GAAACTGACA  GAGGATAGAT

      5040        5050        5060        5070        5080
GGAACAAGCC  CCAGAAGACC  AAGGGCCACA  GAGGGAGCCA  CACAATGAAT

GGACAC;
```

(2) the probe corresponding to ORF-R having the following nucleotide sequence:

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```
8250          8260          8270          8280          8290          8300
  GA   CAGGGCTTGG   AAAGGATTTT   GCTATAAGAT   GGGTGGCAAG   TGGTCAAAAA

      8310          8320          8330          8340          8350
GTAGTGTGGT   TGGATGGCCT   ACTGTAAGGG   AAAGAATGAG   ACGAGCTGAG

      8360          8370          8380          8390          8400
CCAGCAGCAG   ATGGGGTGGG   AGCAGCATCT   CGAGACCTGG   AAAAACATGG

      8410          8420          8430          8440          8450
AGCAATCACA   AGTAGCAATA   CAGCAGCTAC   CAATGCTGCT   TGTGCCTGGC

      8460          8470          8480          8490          8500
TAGAAGCACA   AGAGGAGGAG   GAGGTGGGTT   TTCCAGTCAC   ACCTCAGGTA

      8510          8520          8530          8540          8550
CCTTTAAGAC   CAATGACTTA   CAAGGCAGCT   GTAGATCTTA   GCCACTTTTT

      8560          8570          8580          8590          8600
AAAAGAAAAG   GGGGGACTGG   AAGGGCTAAT   TCACTCCCAA   CGAAGACAAG

      8610          8620          8630          8640          8650
ATATCCTTGA   TCTGTGGATC   TACCACACAC   AAGGCTACTT   CCCTGATTGG

      8660          8670          8680          8690          8700
CAGAACTACA   CACCAGGGCC   AGGGGTCAGA   TATCCACTGA   CCTTTGGATG

      8710          8720          8730          8740          8750
GTGCTACAAG   CTAGTACCAG   TTGAGCCAGA   TAAGGTAGAA   GAGGCCAATA

      8760          8770          8780          8790          8800
AAGGAGAGAA   CACCAGCTTG   TTACACCCTG   TGAGCCTGCA   TGGAATGGAT

      8810          8820          8830          8840          8850
GACCCTGAGA   GAGAAGTGTT   AGAGTGGAGG   TTTGACAGCC   GCCTAGCATT

      8860          8870          8890          8900
TCATCACGTG   GCCCGAGAGC   TGCATCCGGA   GTACTTCAAG   AACTGC;
```

(3) the probe corresponding to ORF-1 having the following nucleotide sequence:

```
5030          5040          5050          5060          5070          5080
  AT   GGAACAAGCC   CCAGAAGACC   AAGGGCCACA   GAGGGAGCCA   CACAATGAAT

      5090          5100          5110          5120          5130
GGACACTAGA   GCTTTTAGAG   GAGCTTAAGA   ATGAAGCTGT   TAGACATTTT

      5140          5150          5160          5170          5180
CCTAGGATTT   GGCTCCATGG   CTTAGGGCAA   CATATCTATG   AAACTTATGG
```

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```
      5190          5200          5210          5220          5230
GGATACTTGG  GCAGGAGTGG  AAGCCATAAT  AAGAATTCTG  CAACAACTGC

      5240          5250          5260          5270          5280
TGTTTATCCA  TTTCAGAATT  GGGTGTCGAC  ATAGCAGAAT  AGGCGTTACT

      5290          5300          5310
CAACAGAGGA  GAGCAAGAAA  TGGAGCCAGT  AGATCC;
```

(4) the probe corresponding to ORF-2 having the following nucleotide sequence:

```
     5280          5290          5300          5310          5320
GCGTTACT  CAACAGAGGA  GAGCAAGAAA  TGGAGCCAGT  AGATCCTAGA

      5330          5340          5350          5360          5370
CTAGAGCCCT  GGAAGCATCC  AGGAAGTCAG  CCTAAAACTG  CTTGTACCAC

      5380          5390          5400          5410          5420
TTGCTATTGT  AAAAAGTGTT  GCTTTCATTG  CCAAGTTTGT  TTCACAACAA

      5430          5440          5450          5460          5470
AAGCCTTAGG  CATCTCCTAT  GGCAGGAAGA  AGCGGAGACA  GCGACGAAGA

      5480          5490          5500          5510
CCTCCTCAAG  GCAGTCAGAC  TCATCAAGTT  TCTCTATCAA  AGCAG;
```

(5) the probe corresponding to ORF-3 having the following nucleotide sequence:

```
     5390          5400          5410          5420          5430
AAAGTGTT  GCTTTCATTG  CCAAGTTTGT  TTCACAACAA  AAGCCTTAGG

      5440          5450          5460          5470          5480
CATCTCCTAT  GGCAGGAAGA  AGCGGAGACA  GCGACGAAGA  CCTCCTCAAG

      5490          5500          5510          5520          5530
GCAGTCAGAC  TCATCAAGTT  TCTCTATCAA  AGCAGTAAGT  AGTACATGTA

      5540          5550          5560          5570          5580
ATGCAACCTA  TACAAATAGC  AATAGCAGCA  TTAGTAGTAG  CAATAATAAT

      5590          5600          5610
AGCAATAGTT  GTGTGGTCCA  TAGTAATCAT  AGAATA;
```

(6) the probe corresponding to ORF-4 having the following nucleotide sequence:

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```
5520          5530          5540          5550          5560          5570
  GT  AGTACATGTA  ATGCAACCTA  TACAAATAGC  AATAGCAGCA  TTAGTAGTAG

      5580          5590          5600          5610          5620
CAATAATAAT  AGCAATAGTT  GTGTGGTCCA  TAGTAATCAT  AGAATATAGG

      5630          5640          5650          5660          5670
AAAATATTAA  GACAAAGAAA  AATAGACAGG  TTAATTGATA  GACTAATAGA

      5680          5690          5700          5710          5720
AAGAGCAGAA  GACAGTGGCA  ATGAGAGTGA  AGGAGAAATA  TCAGCACTTG

      5730          5740          5750          5760          5770
TGGAGATGGG  GGTGGAAATG  GGGCACCATG  CTCCTTGGGA  TATTGATGAT  CTG;
```

and

(7) the probe corresponding to ORF-5 having the following nucleotide sequence:

```
 7970          7980          7990          8000          8010
CACTT  ATCTGGGACC  ATCTGCGGAG  CCTTGTGCCT  CTTCAGCTAC

      8020          8030          8040          8050          8060
CACCGCTTGA  GAGACTTACT  CTTGATTGTA  ACGAGGATTG  TGGAACTTCT

      8070          8080          8090          8100          8110
GGGACGCAGG  GGGTGGGAAG  CCCTCAAATA  TTGGTGGAAT  CTCCTACAGT

      8120          8130          8140          8150          8160
ATTGGAGTCA  GGAACTAAAG  AATAGTGCTG  TTAGCTTGCT  CAATGCCACA

      8170          8180          8190          8200          8210
GCCATAGCAG  TAGCTGAGGG  GACAGATAGG  GTTATAGAAG  TAGTACAAGG

      8220          8230          8240          8250          8260
AGCTTGTAGA  GCTATTCGCC  ACATACCTAG  AAGAATAAGA  CAGGGCTTGG

      8270          8280
AAAGGATTTT  GCTATAAGA; and
```

(b) detecting the formation of hybrids between said one or more nucleic acid probes and nucleic acid present in said biological sample.

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12. The method according to claim 11, wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

13. An *in vitro* diagnostic method for detecting the presence or absence of nucleic acid of a human immunodeficiency virus type 1 (HIV-1) in a biological sample comprising:

(a) contacting said biological sample with a nucleic acid probe of HIV-1 corresponding to ORF-R having the following nucleotide sequence:

```
8250        8260        8270        8280        8290        8300
  GA   CAGGGCTTGG  AAAGGATTTT  GCTATAAGAT  GGGTGGCAAG  TGGTCAAAAA

      8310        8320        8330        8340        8350
GTAGTGTGGT  TGGATGGCCT  ACTGTAAGGG  AAAGAATGAG  ACGAGCTGAG

      8360        8370        8380        8390        8400
CCAGCAGCAG  ATGGGGTGGG  AGCAGCATCT  CGAGACCTGG  AAAAACATGG

      8410        8420        8430        8440        8450
AGCAATCACA  AGTAGCAATA  CAGCAGCTAC  CAATGCTGCT  TGTGCCTGGC

      8460        8470        8480        8490        8500
TAGAAGCACA  AGAGGAGGAG  GAGGTGGGTT  TTCCAGTCAC  ACCTCAGGTA

      8510        8520        8530        8540        8550
CCTTTAAGAC  CAATGACTTA  CAAGGCAGCT  GTAGATCTTA  GCCACTTTTT

      8560        8570        8580        8590        8600
AAAAGAAAAG  GGGGGACTGG  AAGGGCTAAT  TCACTCCCAA  CGAAGACAAG

      8610        8620        8630        8640        8650
ATATCCTTGA  TCTGTGGATC  TACCACACAC  AAGGCTACTT  CCCTGATTGG

      8660        8670        8680        8690        8700
CAGAACTACA  CACCAGGGCC  AGGGGTCAGA  TATCCACTGA  CCTTTGGATG

      8710        8720        8730        8740        8750
GTGCTACAAG  CTAGTACCAG  TTGAGCCAGA  TAAGGTAGAA  GAGGCCAATA

      8760        8770        8780        8790        8800
AAGGAGAGAA  CACCAGCTTG  TTACACCCTG  TGAGCCTGCA  TGGAATGGAT
```

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```
      8810         8820         8830         8840         8850
GACCCTGAGA  GAGAAGTGTT  AGAGTGGAGG  TTTGACAGCC  GCCTAGCATT

      8860         8870         8890         8900
TCATCACGTG  GCCCGAGAGC  TGCATCCGGA  GTACTTCAAG  AACTGC; and
```

(b) detecting the formation of hybrids between said nucleic acid probe and nucleic acid present in said biological sample.

14. The method according to claim ~~13,~~ wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

15. An *in vitro* diagnostic kit for detecting the presence or absence of nucleic acid of a human immunodeficiency virus type 1 (HIV-1) in a biological sample comprising:

(a) a composition comprising one or more nucleic acid probes selected from the group consisting of:

(1) the probe corresponding to ORF-Q having the following nucleotide sequence:

```
4480         4490         4500         4510         4520         4530
 TGC  CAAGAAGAAA  AGCAAAGATC  ATTAGGGATT  ATGGAAAACA  GATGGCAGGT

      4540         4550         4560         4570         4580
GATGATTGTG  TGGCAAGTAG  ACAGGATGAG  GATTAGAACA  TGGAAAAGTT

      4590         4600         4610         4620         4630
TAGTAAAACA  CCATATGTAT  GTTTCAGGGA  AAGCTAGGGG  ATGGTTTTAT

      4640         4650         4660         4670         4680
AGACATCACT  ATGAAAGCCC  TCATCCAAGA  ATAAGTTCAG  AAGTACACAT

      4690         4700         4710         4720         4730
CCCACTAGGG  GATGCTAGAT  TGGTAATAAC  AACATATTGG  GGTCTGCATA

      4740         4750         4760         4770         4780
CAGGAGAAAG  AGACTGGCAT  CTGGGTCAGG  GAGTCTCCAT  AGAATGGAGG
```

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```
      4790          4800          4810          4820          4830
AAAAAGAGAT  ATAGCACACA  AGTAGACCCT  GAACTAGCAG  ACCAACTAAT

      4840          4850          4860          4870          4880
TCATCTGTAT  TACTTTGACT  GTTTTTCAGA  CTCTGCTATA  AGAAAGGCCT

      4890          4900          4910          4920          4930
TATTAGGACA  TATAGTTAGC  CCTAGGTGTG  AATATCAAGC  AGGACATAAC

      4940          4950          4960          4970          4980
AAGGTAGGAT  CTCTACAATA  CTTGGCACTA  GCAGCATTAA  TAACACCAAA

      4990          5000          5010          5020          5030
AAAGATAAAG  CCACCTTTGC  CTAGTGTTAC  GAAACTGACA  GAGGATAGAT

      5040          5050          5060          5070          5080
GGAACAAGCC  CCAGAAGACC  AAGGGCCACA  GAGGGAGCCA  CACAATGAAT

GGACAC;
```

(2) the probe corresponding to ORF-R having the following nucleotide sequence:

```
8250          8260          8270          8280          8290          8300
  GA  CAGGGCTTGG  AAAGGATTTT  GCTATAAGAT  GGGTGGCAAG  TGGTCAAAAA

      8310          8320          8330          8340          8350
GTAGTGTGGT  TGGATGGCCT  ACTGTAAGGG  AAAGAATGAG  ACGAGCTGAG

      8360          8370          8380          8390          8400
CCAGCAGCAG  ATGGGGTGGG  AGCAGCATCT  CGAGACCTGG  AAAAACATGG

      8410          8420          8430          8440          8450
AGCAATCACA  AGTAGCAATA  CAGCAGCTAC  CAATGCTGCT  TGTGCCTGGC

      8460          8470          8480          8490          8500
TAGAAGCACA  AGAGGAGGAG  GAGGTGGGTT  TTCCAGTCAC  ACCTCAGGTA

      8510          8520          8530          8540          8550
CCTTTAAGAC  CAATGACTTA  CAAGGCAGCT  GTAGATCTTA  GCCACTTTTT

      8560          8570          8580          8590          8600
AAAAGAAAAG  GGGGGACTGG  AAGGGCTAAT  TCACTCCCAA  CGAAGACAAG

      8610          8620          8630          8640          8650
ATATCCTTGA  TCTGTGGATC  TACCACACAC  AAGGCTACTT  CCCTGATTGG

      8660          8670          8680          8690          8700
CAGAACTACA  CACCAGGGCC  AGGGGTCAGA  TATCCACTGA  CCTTTGGATG
```

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```
      8710         8720         8730         8740         8750
GTGCTACAAG  CTAGTACCAG  TTGAGCCAGA  TAAGGTAGAA  GAGGCCAATA

      8760         8770         8780         8790         8800
AAGGAGAGAA  CACCAGCTTG  TTACACCCTG  TGAGCCTGCA  TGGAATGGAT

      8810         8820         8830         8840         8850
GACCCTGAGA  GAGAAGTGTT  AGAGTGGAGG  TTTGACAGCC  GCCTAGCATT

      8860         8870         8890         8900
TCATCACGTG  GCCCGAGAGC  TGCATCCGGA  GTACTTCAAG  AACTGC;
```

(3) the probe corresponding to ORF-1 having the following nucleotide sequence:

```
5030         5040         5050         5060         5070         5080
  AT  GGAACAAGCC  CCAGAAGACC  AAGGGCCACA  GAGGGAGCCA  CACAATGAAT

      5090         5100         5110         5120         5130
GGACACTAGA  GCTTTTAGAG  GAGCTTAAGA  ATGAAGCTGT  TAGACATTTT

      5140         5150         5160         5170         5180
CCTAGGATTT  GGCTCCATGG  CTTAGGGCAA  CATATCTATG  AAACTTATGG

      5190         5200         5210         5220         5230
GGATACTTGG  GCAGGAGTGG  AAGCCATAAT  AAGAATTCTG  CAACAACTGC

      5240         5250         5260         5270         5280
TGTTTATCCA  TTTCAGAATT  GGGTGTCGAC  ATAGCAGAAT  AGGCGTTACT

      5290         5300         5310
CAACAGAGGA  GAGCAAGAAA  TGGAGCCAGT  AGATCC;
```

(4) the probe corresponding to ORF-2 having the following nucleotide sequence:

```
    5280         5290         5300         5310         5320
GCGTTACT  CAACAGAGGA  GAGCAAGAAA  TGGAGCCAGT  AGATCCTAGA

      5330         5340         5350         5360         5370
CTAGAGCCCT  GGAAGCATCC  AGGAAGTCAG  CCTAAAACTG  CTTGTACCAC

      5380         5390         5400         5410         5420
TTGCTATTGT  AAAAAGTGTT  GCTTTCATTG  CCAAGTTTGT  TTCACAACAA

      5430         5440         5450         5460         5470
AAGCCTTAGG  CATCTCCTAT  GGCAGGAAGA  AGCGGAGACA  GCGACGAAGA
```

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```
      5480         5490         5500         5510
CCTCCTCAAG  GCAGTCAGAC  TCATCAAGTT  TCTCTATCAA  AGCAG;
```

(5) the probe corresponding to ORF-3 having the following nucleotide sequence:

```
    5390         5400         5410         5420         5430
AAAGTGTT  GCTTTCATTG  CCAAGTTTGT  TTCACAACAA  AAGCCTTAGG

      5440         5450         5460         5470         5480
CATCTCCTAT  GGCAGGAAGA  AGCGGAGACA  GCGACGAAGA  CCTCCTCAAG

      5490         5500         5510         5520         5530
GCAGTCAGAC  TCATCAAGTT  TCTCTATCAA  AGCAGTAAGT  AGTACATGTA

      5540         5550         5560         5570         5580
ATGCAACCTA  TACAAATAGC  AATAGCAGCA  TTAGTAGTAG  CAATAATAAT

      5590         5600         5610
AGCAATAGTT  GTGTGGTCCA  TAGTAATCAT  AGAATA;
```

(6) the probe corresponding to ORF-4 having the following nucleotide sequence:

```
5520         5530         5540         5550         5560         5570
  GT  AGTACATGTA  ATGCAACCTA  TACAAATAGC  AATAGCAGCA  TTAGTAGTAG

      5580         5590         5600         5610         5620
CAATAATAAT  AGCAATAGTT  GTGTGGTCCA  TAGTAATCAT  AGAATATAGG

      5630         5640         5650         5660         5670
AAAATATTAA  GACAAAGAAA  AATAGACAGG  TTAATTGATA  GACTAATAGA

      5680         5690         5700         5710         5720
AAGAGCAGAA  GACAGTGGCA  ATGAGAGTGA  AGGAGAAATA  TCAGCACTTG

      5730         5740         5750         5760         5770
TGGAGATGGG  GGTGGAAATG  GGGCACCATG  CTCCTTGGGA  TATTGATGAT  CTG;
```

and

(7) the probe corresponding to ORF-5 having the following nucleotide sequence:

```
 7970         7980         7990         8000         8010
CACTT  ATCTGGGACG  ATCTGCGGAG  CCTTGTGCCT  CTTCAGCTAC
```

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```
      8020        8030        8040        8050        8060
CACCGCTTGA  GAGACTTACT  CTTGATTGTA  ACGAGGATTG  TGGAACTTCT

      8070        8080        8090        8100        8110
GGGACGCAGG  GGGTGGGAAG  CCCTCAAATA  TTGGTGGAAT  CTCCTACAGT

      8120        8130        8140        8150        8160
ATTGGAGTCA  GGAACTAAAG  AATAGTGCTG  TTAGCTTGCT  CAATGCCACA

      8170        8180        8190        8200        8210
GCCATAGCAG  TAGCTGAGGG  GACAGATAGG  GTTATAGAAG  TAGTACAAGG

      8220        8230        8240        8250        8260
AGCTTGTAGA  GCTATTCGCC  ACATACCTAG  AAGAATAAGA  CAGGGCTTGG

      8270        8280
AAAGGATTTT  GCTATAAGA;
```

(b) reagents for the detection of hybrids; and

(c) a biological reference sample lacking nucleic acid recognized by said nucleic acid probe composition;

wherein the nucleic acid probe composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of hybrids formed between said one or more nucleic acid probes and nucleic acid present in said biological sample.

16. The kit according to claim 15, wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

17. An *in vitro* diagnostic kit for detecting the presence or absence of nucleic acid of a human immunodeficiency virus type 1 (HIV-1) in a biological sample comprising:

(a) a composition comprising a nucleic acid probe corresponding to ORF-R having the following nucleotide sequence:

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```
8250          8260          8270          8280          8290          8300
  GA  CAGGGCTTGG  AAAGGATTTT  GCTATAAGAT  GGGTGGCAAG  TGGTCAAAAA

      8310          8320          8330          8340          8350
GTAGTGTGGT  TGGATGGCCT  ACTGTAAGGG  AAAGAATGAG  ACGAGCTGAG

      8360          8370          8380          8390          8400
CCAGCAGCAG  ATGGGGTGGG  AGCAGCATCT  CGAGACCTGG  AAAAACATGG

      8410          8420          8430          8440          8450
AGCAATCACA  AGTAGCAATA  CAGCAGCTAC  CAATGCTGCT  TGTGCCTGGC

      8460          8470          8480          8490          8500
TAGAAGCACA  AGAGGAGGAG  GAGGTGGGTT  TTCCAGTCAC  ACCTCAGGTA

      8510          8520          8530          8540          8550
CCTTTAAGAC  CAATGACTTA  CAAGGCAGCT  GTAGATCTTA  GCCACTTTTT

      8560          8570          8580          8590          8600
AAAAGAAAAG  GGGGGACTGG  AAGGGCTAAT  TCACTCCCAA  CGAAGACAAG

      8610          8620          8630          8640          8650
ATATCCTTGA  TCTGTGGATC  TACCACACAC  AAGGCTACTT  CCCTGATTGG

      8660          8670          8680          8690          8700
CAGAACTACA  CACCAGGGCC  AGGGGTCAGA  TATCCACTGA  CCTTTGGATG

      8710          8720          8730          8740          8750
GTGCTACAAG  CTAGTACCAG  TTGAGCCAGA  TAAGGTAGAA  GAGGCCAATA

      8760          8770          8780          8790          8800
AAGGAGAGAA  CACCAGCTTG  TTACACCCTG  TGAGCCTGCA  TGGAATGGAT

      8810          8820          8830          8840          8850
GACCCTGAGA  GAGAAGTGTT  AGAGTGGAGG  TTTGACAGCC  GCCTAGCATT

      8860          8870          8890          8900
TCATCACGTG  GCCCGAGAGC  TGCATCCGGA  GTACTTCAAG  AACTGC;
```

(b) reagents for the detection of hybrids; and

(c) a biological reference sample lacking nucleic acid recognized by said nucleic acid probe composition;

wherein the nucleic acid probe composition, reagents, and biological reference sample are present in an amount sufficient

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to perform the detection of hybrids formed between said nucleic acid probe and nucleic acid present in said biological sample.

18. The kit according to claim 17, wherein said probe is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

19. An *in vitro* diagnostic method for the detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with one or more peptides selected from the group consisting of:

(1) the peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

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(2) the peptide corresponding to ORF-R having the following amino acid sequence:

Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) the peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) the peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) the peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) the peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu; and

(7) the peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-; and

(b) detecting the formation of antigen-antibody complex between said one or more peptides and antibodies present in said biological sample.

20. The method of claim 19, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

21. An *in vitro* diagnostic method for the detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with a peptide corresponding to ORF-B having the following amino acid sequence:

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(b) detecting the formation of antigen-antibody complex between said peptide and antibodies present in said biological sample.

22. The method of claim 21, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

23. A diagnostic kit for the *in vitro* detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) a peptide composition comprising one or more peptides selected from the group consisting of:

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(1) the peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

(2) the peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) the peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) the peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) the peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) the peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu;

(7) the peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antibodies recognized by said peptide composition,

wherein the peptide composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said one or more peptides and antibodies present in said biological sample.

24. The kit of claim 23, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

25. A diagnostic kit for the *in vitro* detection of the presence or absence of antibodies which bind to antigens of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) a peptide composition comprising a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antibodies recognized by said peptide composition,

wherein the peptide composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said ~~peptide and antibodies present in said biological sample.~~

26. The kit of claim 25, wherein said peptide is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

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27. An *in vitro* diagnostic method for the detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with one or more antibodies selected from the group consisting of:

(1) an antibody against a peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

(2) an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) an antibody against a peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) an antibody against a peptide corresponding to ORF-2 having the following amino acid sequence:

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) an antibody against a peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) an antibody against a peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu; and

(7) an antibody against a peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-; and

(b) detecting the formation of antigen-antibody complex between said one or more antibodies and antigens present in said biological sample.

28. The method of claim 27, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

29. An *in vitro* diagnostic method for the detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) contacting a biological sample with an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys; and

(b) detecting the formation of antigen-antibody complex between said antibody and antigens present in said biological sample.

30. The method of claim 29, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

31. A diagnostic kit for the *in vitro* detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) an antibody composition comprising one or more antibodies selected from the group consisting of:

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(1) an antibody against a peptide corresponding to ORF-Q having the following amino acid sequence:

Cys-Gln-Glu-Glu-Lys-Gln-Arg-Ser-Leu-Gly-Ile-Met-Glu-Asn-Arg-Trp-Gln-Val-Met-Ile-Val-Trp-Gln-Val-Asp-Arg-Met-Arg-Ile-Arg-Thr-Trp-Lys-Ser-Leu-Val-Lys-His-His-Met-Tyr-Val-Ser-Gly-Lys-Ala-Arg-Gly-Trp-Phe-Tyr-Arg-His-His-Tyr-Glu-Ser-Pro-His-Pro-Arg-Ile-Ser-Ser-Glu-Val-His-Ile-Pro-Leu-Gly-Asp-Ala-Arg-Leu-Val-Ile-Thr-Thr-Val-Trp-Gly-Leu-His-Thr-Gly-Glu-Pro-Asp-Trp-His-Leu-Gly-Gln-Gly-Val-Ser-Ile-Glu-Trp-Arg-Lys-Lys-Arg-Tyr-Ser-Thr-Gln-Val-Asp-Pro-Glu-Leu-Ala-Asp-Gln-Leu-Ile-His-Leu-Tyr-Tyr-Phe-Asp-Cys-Phe-Ser-Asp-Ser-Ala-Ile-Arg-Lys-Ala-Leu-Leu-Gly-His-Ile-Val-Ser-Pro-Arg-Cys-Phe-Tyr-Gln-Ala-Gly-His-Asn-Lys-Val-Gly-Ser-Leu-Gln-Tyr-Leu-Ala-Leu-Ala-Ala-Leu-Ile-Thr-Pro-Lys-Lys-Ile-Lys-Pro-Pro-Leu-Pro-Ser-Val-Thr-Lys-Leu-Thr-Glu-Asp-Arg-Trp-Asn-Lys-Pro-Gln-Lys-Thr-Lys-Gly-His-Arg-Gly-Ser-His-Thr-Met-Asn-Gly-His;

(2) an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(3) an antibody against a peptide corresponding to ORF-1 having the following amino acid sequence:

Met-Glu-Gln-Ala-Pro-Glu-Asp-Gln-Gly-Pro-Gln-Arg-Asp-Pro-His-Asn-Glu-Trp-Thr-Leu-Gln-Leu-Leu-Glu-Glu-Leu-Lys-Asn-Glu-Ala-Val-Arg-His-Phe-Pro-Arg-Ile-Trp-Leu-His-Gly-Leu-Gly-Gln-His-Ile-Tyr-Glu-Thr-Tyr-Gly-Asp-Thr-Trp-Ala-Gly-Val-Glu-Ala-Ile-Ile-Arg-Ile-Leu-Gln-Gln-Leu-Leu-Phe-Ile-His-Phe-Arg-Ile-Gly-Cys-Arg-His-Ser-Arg-Ile-Gly-Val-Thr-Gln-Gln-Arg-Arg-Ala-Arg-Asn-Gly-Ala-Ser-Arg-Ser;

(4) an antibody against a peptide corresponding to ORF-2 having the following amino acid sequence:

C 6 cont

B 6 cont

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Ala-Leu-Leu-Asn-Arg-Gly-Glu-Gln-Glu-Met-Glu-Pro-Val-Asp-Pro-Arg-Leu-Glu-Pro-Trp-Lys-His-Pro-Gly-Ser-Gln-Pro-Lys-Thr-Ala-Cys-Thr-Thr-Cys-Tyr-Cys-Lys-Lys-Cys-Cys-Phe-His-Cys-Gln-Val-Cys-Phe-Thr-Thr-Lys-Ala-Leu-Gly-Ile-Ser-Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Gln-Gly-Ser-Gln-Thr-His-Gln-Val-Ser-Leu-Ser-Lys-Gln;

(5) an antibody against a peptide corresponding to ORF-3 having the following amino acid sequence:

Lys-Val-Leu-Leu-Ser-Leu-Pro-Ser-Leu-Phe-His-Asn-Lys-Ser-Leu-Arg-His-Leu-Leu-Trp-Gln-Glu-Glu-Ala-Glu-Thr-Ala-Thr-Lys-Thr-Ser-Ser-Arg-Gln-Ser-Asp-Ser-Ser-Ser-Phe-Ser-Ile-Lys-Ala-Val-Ser-Ser-Thr-Cys-Asn-Ala-Thr-Tyr-Thr-Asn-Ser-Asn-Ser-Ser-Ile-Ser-Ser-Ser-Asn-Asn-Asn-Ser-Asn-Ser-Cys-Val-Val-His-Ser-Asn-His-Arg-Ile;

(6) an antibody against a peptide corresponding to ORF-4 having the following amino acid sequence:

Val-Val-His-Val-Met-Gln-Pro-Ile-Gln-Ile-Ala-Ile-Ala-Ala-Leu-Val-Val-Ala-Ile-Ile-Ile-Ala-Ile-Val-Val-Trp-Ser-Ile-Val-Ile-Ile-Glu-Tyr-Arg-Lys-Ile-Leu-Arg-Gln-Arg-Lys-Ile-Asp-Arg-Leu-Ile-Asp-Arg-Leu-Ile-Glu-Arg-Ala-Glu-Asp-Ser-Gly-Asn-Glu-Ser-Glu-Gly-Glu-Ile-Ser-Ala-Leu-Val-Glu-Met-Gly-Val-Glu-Met-Gly-His-His-Ala-Pro-Trp-Asp-Ile-Asp-Asp-Leu; and

(7) an antibody against a peptide corresponding to ORF-5 having the following amino acid sequence:

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His-Leu-Ser-Gly-Thr-Ile-Cys-Gly-Ala-Leu-Cys-Leu-Phe-Ser-Tyr-His-Arg-Leu-Arg-Asp-Leu-Leu-Leu-Ile-Val-Thr-Arg-Ile-Val-Glu-Leu-Leu-Gly-Arg-Arg-Gly-Trp-Glu-Ala-Leu-Lys-Tyr-Trp-Trp-Asn-Leu-Leu-Gln-Tyr-Trp-Ser-Gln-Glu-Leu-Lys-Asn-Ser-Ala-Val-Ser-Leu-Leu-Asn-Ala-Thr-Ala-Ile-Ala-Val-Ala-Glu-Gly-Thr-Asp-Arg-Val-Ile-Glu-Val-Val-Gln-Gly-Ala-Cys-Arg-Ala-Ile-Arg-His-Ile-Pro-Arg-Arg-Ile-Arg-Gln-Gly-Leu-Glu-Arg-Ile-Leu-Leu-;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antigens recognized by said antibody composition,

wherein the antibody composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said one or more antibodies and antigens present in said biological sample.

32. The kit of claim 31, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.

33. A diagnostic kit for the *in vitro* detection of the presence or absence of antigens which bind to antibodies of a human immunodeficiency virus type 1 (HIV-1) comprising:

(a) an antibody composition comprising an antibody against a peptide corresponding to ORF-R having the following amino acid sequence:

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Asp-Arg-Ala-Trp-Lys-Gly-Phe-Cys-Tyr-Lys-Met-Gly-Gly-Lys-Trp-Ser-Lys-Ser-Ser-Val-Val-Gly-Trp-Pro-Thr-Val-Arg-Glu-Arg-Met-Arg-Arg-Ala-Glu-Pro-Ala-Ala-Asp-Gly-Val-Gly-Ala-Ala-Ser-Arg-Asp-Leu-Phe-Lys-His-Gly-Ala-Ile-Thr-Ser-Ser-Asn-Thr-Ala-Ala-Thr-Asn-Ala-Ala-Cys-Ala-Trp-Leu-Phe-Ala-Gln-Phe-Phe-Phe-Phe-Val-Gly-Phe-Pro-Val-Thr-Pro-Gln-Val-Pro-Leu-Arg-Pro-Met-Thr-Tyr-Lys-Ala-Ala-Val-Asp-Leu-Ser-His-Phe-Leu-Lys-Glu-Lys-Gly-Gly-Leu-Glu-Gly-Leu-Ile-His-Ser-Gln-Arg-Arg-Gln-Asp-Ile-Leu-Asp-Leu-Trp-Ile-Tyr-His-Thr-Gln-Gly-Tyr-Phe-Pro-Asp-Trp-Gln-Asn-Tyr-Thr-Pro-Gly-Pro-Gly-Val-Arg-Tyr-Pro-Leu-Thr-Phe-Gly-Trp-Cys-Tyr-Lys-Leu-Val-Pro-Val-Phe-Pro-Asp-Lys-Val-Phe-Phe-Ala-Asn-Lys-Gly-Phe-Asn-Thr-Ser-Leu-Leu-His-Pro-Val-Ser-Leu-His-Gly-Met-Asp-Asp-Pro-Glu-Arg-Glu-Val-Leu-Glu-Trp-Arg-Phe-Asp-Ser-Arg-Leu-Ala-Phe-His-His-Val-Ala-Arg-Glu-Leu-His-Pro-Glu-Tyr-Phe-Lys-Asn-Cys;

(b) reagents for the detection of the formation of antigen-antibody complex; and

(c) a biological reference sample lacking antigens recognized by said antibody composition,

wherein the antibody composition, reagents, and biological reference sample are present in an amount sufficient to perform the detection of antigen-antibody complex formed between said antibody and antigens present in said biological sample.

34. The kit of claim 33, wherein said antibody is labeled with a label selected from the group consisting of a radioactive label, an enzymatic label, and a fluorescent label.--

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